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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,098	03/02/2004	Mitsukane Nakashima	GOT-0022	1190

23353 7590 11/23/2005

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EXAMINER
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KASTLER, SCOTT R

ART UNIT	PAPER NUMBER
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1742

DATE MAILED: 11/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/790,098

**Applicant(s)**

NAKASHIMA, MITSUKANE

**Examiner**

Scott Kastler

**Art Unit**

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/30/2005 has been entered.

***Double Patenting***

Applicant is advised that should claim 1 be found allowable, claim 7 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k). Applicant has stated, in the arguments filed on 9/30/2005 for example, that claims 1 and 7 are identical in scope (see page 4, third paragraph of the arguments for example).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art of the instant disclosure in view of Yamaoka. The admitted prior art of the instant disclosure, in instant figures 5-7 for example, teaches a metal melting furnace (100) including a preheating flue (120) provided on it's upper portion with a material inlet opening, and on it's lower portion with an inclined hearth and a melting burner (125) oriented toward the lower portion of the flue and including a meltable material holder (150), a molten metal reservoir (135) provided with a temperature maintaining burner (136), and an inspection door (124), thereby showing all aspects of the above claims except a separation wall or the specifically recited component configurations (a cylindrical meltable material holder or specific separation wall configurations). Yamoka teaches that in melting furnaces including a preheating flue (7), inclined hearth (8) and molten material reservoir (9) it was known in the art at the time the invention was made to include a separation wall (6) including a melt passage (5) a slag blocking portion (21) and an exhaust gas opening (14) between the inclined hearth and the molten material reservoir (9) in order to provide a cleaner, higher quality melt by reducing or preventing the mixing of oxides and deposits into the melt (see col. 1 lines 39-45 for example). Because the instantly recited components in the prior art (the separation wall and meltable material holder (150) ) operate in substantially the same manner with substantially the same results as the same components in the instant claims, it would have been a modification obvious to one of ordinary skill in the art at the time the invention was made to alter the configurations of these components to any other equally useful configuration, since it has been well settled that motivation to alter the shape or configuration of a component without materially altering the operation of that component would have been a modification obvious to one of ordinary skill in the art at the time

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the invention was made. See MPEP 2144.04 IV B, and *In re Dailey* 149 USPQ 47. Because the furnace system of the admitted prior art of the instant disclosure would also desire a cleaner melt, motivation to include a separation wall, as taught by Yamoka to provide a cleaner melt in furnaces of the type disclosed by the admitted prior art of the instant disclosure, where the wall and other components are of any equally useful configuration, would have been a modification obvious to one of ordinary skill in the art at the time the invention was made.

### ***Response to Arguments***

Applicant's arguments filed on 10/18/2005 and 9/30/2005 have been fully considered but they are not persuasive. Applicant's argument that the applied prior art does not teach a metal processing portion in the form of a chamber is not persuasive because the admitted prior art of the instant disclosure, as applied above, teaches such a chamber at (135) for example, where Yamoka teaches the desirability of including a separating wall (6) between the inclined hearth and the melt chamber.

Applicant's further argument that the applied prior art (Yamoka et al) does not specifically teach the instantly recited separation wall configuration (where the wall opening is above the melt chamber floor) is not persuasive because as stated in the above rejection, applicant has not yet presented in proper affidavit or declarative form, any showing(s) that the instantly recited separation wall configuration imparts any new or unexpected results when compared to the separation wall of Yamoka et al, which is stated to operate in substantially the same manner for substantially the same objectives as the instantly claimed separation wall (to

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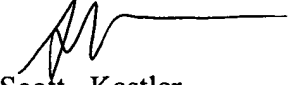
provide a cleaner melt product). Applicant's arguments and conclusory statements alone, are insufficient to establish new or unexpected results. See *In re Wood et al*, 199 USPQ 137.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Kastler whose telephone number is (571) 272-1243. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Scott Kastler  
Primary Examiner  
Art Unit 1742

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